UST Compliance Assistance Checklist

PART I. OWNER/OPERATOR INFORMATION

1. Facility Name: East Lake Convenience Store
2. Owner: Mille Lacs Band of Ojibwe Corporate Commission
3. Operator:
5. Contact Person: Dave Peer (John Weir)
6. UST Site Phone #: 218-768-3344

6. Date of Visit: 7/25/13 7. Marketer: X Non-Marketer:
8. Site Arrival/Departure (Time): 3:00 / 4:00
9. Facility Address:
10: Team Members: Scott Hansen Dave Peer -

PART II. UST SITE INFORMATION

	1	2	3	4	5	6	7
1. Tank #:	1	2	3	4			
2. Tank Type:	STIP3	←	←	←			
3. Piping Type:	Coated Steel	←	←	←			
4. Size of Tank:	10K	6K	4K				
5. Tank Contents:	Gas-Reg.	Gas Prem.	Diesel				
6. Install Date:	8-7-00	→					
7. TTT Date:							
8. LTT Date:	Functionality Test (Pass) Completed 5-31-12						
9: LD (Tank):	ATG 350	VR TLS 350 w/CSLD					
10: LD (Pipe):	ATG 350 - ELLD						
11. Closure Date:							
	Perm ___ Temp ___	Perm ___ Temp ___	Perm ___ Temp ___	Perm ___ Temp ___	Perm ___ Temp ___	Perm ___ Temp ___	Perm ___ Temp ___
12. Spill:	Yes X No ___	Yes X No ___	Yes X No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___
13. Overfill:	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___
Type:	Flapper	ALARM →					
14. CP (Tank):	Yes X No ___	Yes X No ___	Yes X No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___
Date:	Pass 9-4-2012 -						
Type:	S Steel	Fiber?	Steel				
15. CP (Piping):	Yes X No ___	Yes ___ No ___	Yes X No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___
Date:	Pass 9-4-2012 -						
Type:							

16. CP Monitoring: [For all cathodic protection systems (Galvanic Anodes and Impressed Current Systems)]

	1	2	3	4	5	6	7
6 Mo./3 Yrs:	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___
Six Months:	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___
Records:	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___

Note: Monitoring conducted within six month of installation and three years after initial monitoring. [280.31(b)(I)]
Note: Monitoring conducted within six month of any repairs to UST system. [280.33(e)]
Note: Records on file of last two monitoring results. [280.31(d)(2)]

17. CP Monitoring: [For Impressed Current Systems Only]

	1	2	3	4	5	6	7
60 Day Insp.:	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___
Records:	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___	Yes ___ No ___

Note: System is inspected ever 60 days, involvers reading and recording systems voltage and amperage. [280.31(c)]
Note: Records on file of last three voltage and amperage readings. [280.33(d)(I)]

(5/9/2011)

UST Compliance Assistance Checklist

PART III. RECOMMENDATION(S) & NARRATIVE COMMENTS

1. Facility to provide info. on compliance: Yes X No ___
Notes: ___

2. Follow-up visit recommended Yes X No ___
Notes: ___

3. Financial Responsibility (FR): Yes X No ___ Expiration Date: ___

4. Inspector's Remarks: Facility ~~is~~ ~~good~~ needs to: (1.) Get Functionality Test by/around 5/31/13
(2.) File monthly line leak tests ✓
(3.) I am checking on CP - retest? w/Pump & Meter

5. Additional Remarks/Comments:

Records

Line Leak .2 gph	1	2	3	
March 3 2013	PASS	→		Run off of History
Feb 1 2013	PASS	→		
Jan 2 2013	PASS	→		
Dec 1 2012	PASS	→		
Nov 3 2012	PASS	→		
Oct 4 2012	PASS	→		
Sept. 2 2012	PASS	→		
Aug. 1 2012	PASS	→		

Tank Tightness	1	2	3	
March 15 2013	Pass	→		
Feb. 15 2013	Pass	→		
Jan. 31 2013	Pass	→		
Dec. 15 2012	Pass	→		
Nov. 30 2012	Pass	→		
Oct. 4 2012	PASS	PASS (No Record)		
Sept. 15, 2012	Pass	→		

Scott Hamer
Inspector Signature

April 29, 2013
Date

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

UST Cathodic Protection System Evaluation
Galvanic (Sacrificial Anode) Type
Underground Storage Tanks (UST) Program

Doc Type: Compliance Certification

Instructions: Within 30 days, send completed form to Joann Henry, Minnesota Pollution Control Agency (MCPA) at the address above, fax to 651-297-2343, or e-mail joann.henry@state.mn.us.

- **All reports must be submitted regardless of results (pass, fail, or inconclusive)**
- **Incomplete, unsigned, or illegible forms will not be accepted and will be returned.**

1. UST facility

MPCA Site ID #: 121799

Name: East lake Conv.
Address: 36040 Hwy 65
City: Mcgregor Zip code: 55760
County: Aitkin Phone:
Contact name (if different than above):

2. UST owner/operator

Name:
Address:
City State: Mn
Zip code: Phone:
Contact phone

3. Cathodic Protection (CP) tester information and qualifications

Tester name (print): Brent Banasiuk
Company name: Pump and Meter Service Inc
Address: 11303 Excelsior Blvd.
City: Hopkins
State: Mn Zip code: 55343 Phone: 952 933 4800
E-mail: bbanasiuk@pump-meter com
National Association of Corrosion Engineers (NACE) international certification #:
Steel Tank Institute (STI) certification #: CP31712

4. Reason survey was conducted (check only one)

☒ Routine - 3 years ☐ Routine - within 6 months of install ☐ 30-day re-survey after fail ☒ Re-survey within 6 months of repair/modification

Date next CP survey must be conducted by (mm/dd/yyyy): 9/1/2015 (Required within 6 months of install or repair, and every 3 years thereafter.)

5. CP tester's evaluation (check only one)

☒ **Pass** All protected structures at this facility pass the CP survey and the continuity survey indicates all protected structures are isolated. It is judged that adequate CP has been provided to the UST system (Complete sections 7 and 8).

☐ **Fail** One or more protected structures at this facility fail the CP survey, and it is judged that adequate CP has not been provided to the UST system. (Complete sections 7 and 8).

☐ **Inconclusive** The remote and the local do not both indicate the same test result on all protected structures (both pass or both fail), or the continuity survey indicates continuous or inconclusive results when compared to non-protected structures the survey must be evaluated by a corrosion expert (Corrosion Expert to complete section 6).

CP Tester Signature: Brent E. Banasiuk
Date CP survey performed (mm/dd/yyyy): 9/4/2012

6. Corrosion expert's evaluation (if applicable)

The attached survey must be conducted and/or evaluated by a corrosion expert when: a) conducting repairs to metallic structures which are non-factory coated with dielectric material; b) adding supplemental anodes to the tanks and/or piping without following accepted industry standards; c) the local and remote structure-to-soil potential did not result in the same outcome (both pass or both fail); d) the continuity survey indicates one or more of the protected structures are not isolated; e) when required by MPCA (Corrosion Expert to complete sections 7 and 8)

☐ **Pass** All protected structures at this facility have been judged that the adequate CP is provided to the UST system

☐ **Fail** One or more protected structures at this facility fail the CP survey and it is judged that adequate CP has not been provided to the UST system

Corrosion expert's name (print):
Company name: Phone:
NACE Int./PE certification: NACE Int./PE certification #:
CP Expert Signature: Date (mm/dd/yyyy):

7. Criteria applicable to evaluation (check all that apply)

☒ **-850 On** Structure-to-soil potential more negative than -850 millivolts (mV) with the protective current applied.

☐ **-850 Off** Structure-to-soil potential more negative than -850 mV with the protective current momentarily interrupted. ("Instant Off")

☐ **100 mV** Structure tested exhibits at least 100 mV of cathodic polarization. ("Instant Off" readings minus native /depol readings)

Facility name:

Date of test: 9/4/2012

(Note: The facility name and date of test will automatically populate from page one upon printing, if filled out electronically.)

8. Action required as a result of this evaluation (check only one)

- ☒ **None** — CP is adequate. No further action is necessary at this time. Test again by no later than (see Section 4).
- ☐ **Retest** — CP may not be adequate. Retest within 30 days to determine if passing results can be achieved. (Retests may occur only if all protected structures are isolated from non-protected structures)
- ☐ **Repair & Retest** — CP is not adequate. Repair/modification is necessary within the next 60 days, or permanently close the tank system.

9. CP system repairs and/or modification information

Date of "failing" test: _____ *(mm/dd/yyyy)* Date of repair: 8/9/2012 *(mm/dd/yyyy)* Repair company: Pump and Meter Service Inc

Name of lead repair technician: Brent Banasiuk Phone # 612 363 2190

Certification of repair technician (check all that apply): ☒ Steel Tank Institute ☐ NACE ☐ MPCA certified supervisor

Note: submit failing test results with this report if not already submitted.

Description of Repairs (check all that apply)

- ☒ 1. Supplemental anodes for a sti-P_3® tank
- ☐ 2. Supplemental anodes for metallic pipe which is factory coated with dielectirc material (fusion bonded epoxy or equivilent)
- ☐ 3. Supplemental anodes for a non-sti-P_3® tank. (e.g., bare steel)
- ☐ 4. Supplimental anodes for metalic pipe which is non-factory coated with dielectirc material (e.g., galvanized, copper, bare steel, etc).

Repairs /modifications for 1 & 2 must be designed by a "corrosion expert" or installed per industry standards. Attach corrosion experts design, or documentation industry standard was followed. (Section 6 must be signed if designed by a corrosion expert.)

Repairs/modifications for 3 & 4 and must be designed and evaluated by a corrosion expert only. Attach a corrosion experts design. (Section 6 must be signed.)

- ☐ 5. Isolation of Galvanically protected tanks/piping. (explain in "remarks/other" below)
- ☐ 6. Isolation of non-protected metal pipe segments (e.g . flex connectors) at STP or dispenser sumps (explain in "remarks/other" below).

Remarks/Other: Added 2 anodes to spli tank Premium/Dieselt

10. Galvanic (sacrificial anode) structure to soil potential and continuity survey

Half Cell Placement (testing) on frozen soil, concrete, asphalt, or other paving materials is not acceptable.

Structure to Soil Potentials:

- The half cell must be placed in a minimum of **three locations per tank, and three locations per piping run**. At least one of the reference cell locations must be in the soil directly over the tested structure (local); and at least one must be placed in soil approximately 25 to100 feet away from the structure (remote). The third location is at the discretion of the tester (either local or remote).
- When testing flex connectors only, **two tests points are required for each flex connector**, one local and one remote.
- Both the local and the remote voltage must meet one of the three criteria listed in section 7 in order for the structure to pass. Inconclusive must be indicated when both the local and the remote structure-to-soil potentials do not result in the same outcome (both pass or both fail).
- If the "-850 mV Off" or the "100 mV Polarization" criteria is used for galvanic systems, record structure-to-soil potential readings on the MPCA Impressed Current data sheet or similar form.

Continuity Testing: (Point-to-Point and/or Fixed Cell-Moving Ground)

- Point-to-Point: When conducting this method, the leads of the volt meter are required to contact the two structures being examined to demonstrate isolation or continuity. A half cell is not used for this test method.
- Fixed Cell-Moving Ground: When conducting this method, the half cell must be placed in the soil at a remote location approximately 25 to100 feet away and left undisturbed. The other lead of the meter is moved to structures being evaluated.
- To interpret continuity data for either method compare the difference in voltage of the structures evaluated and use the following guidelines: 1 mV or less = continuous, 1-10 mV= inconclusive, greater than 10 mV = isolated.
- For galvanic systems, the structure that is to be protected must be isolated from all other non-protected metallic structure in order to "pass" the continuity survey.
- If other approved continuity testing methods are used, alter this form or submit the data on a separate sheet.

Facility name: Date of test: 9/4/2012

(Note: The facility name and date of test will automatically populate from page one upon printing, if filled out electronically.)

Describe soil type and location(s) of remote reference cell placement(s) (e.g., Black Dirt, 30 feet NW of Tank #1 spill bucket):

Remote location #1: 70' feet away grass area

Remote location #2:

Describe soil type(s) of local reference cell placements: Drilled holes @ Fill Area

Structure: (Example) Tank 1

Structure to soil potentials (mV)

Half cell site map code	Half cell placement description	"ON" Voltage
(Ex)1	Local, soil at ATG manway	-1011 mV
(Ex)2	Local, Soil at STP manway	-995 mV
(Ex)R-1	Remote #1	-1042 mV

Structure contact point(s): (Ex)Tank Bottom

Continuity testing (mV)

Structure tested	Point-to-point voltage	Fixed cell remote voltage	Isolated/ Continuous/ Inconclusive
(Ex) ATG Conduit	475 mV		Isolated
(Ex) STP conduit		-528 mV	Isolated
(Ex) Vent	421 mV		Isolated
(Ex) Fill Riser	375 mV	-522 mV	Isolated

Overall Structure Results (Structure to soil potentials and continuity): ☒ Pass ☐ Fail ☐ Inconclusive

Structure: 002 Premium/Diesel

002 C-1	Diesel Fill Area	-1163
002 C-2	Premium Fill Area	-1114
002 C-3	Remote	-1119

Diesel Fill	-355	Isolated
Premium Fill	-328	Isolated
ATG Risers	-321/-342	Isolated
ATG Conduits	-198/-229	Isolated

Structure contact point(s): Tank Bottom

Overall Structure Results (Structure to soil potentials and continuity): ☒ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Facility name:

Date of test: 9/4/2012

(Note: The facility name and date of test will automatically populate from page one upon printing, if filled out electronically.)

	Structure to soil potentials (mV)		Continuity testing (mV)			
Half cell site map code	Half cell placement description	"ON" Voltage	Structure tested	Point-to-point voltage	Fixed cell remote voltage	Isolated/ Continuous/ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Comments/Remarks:

If separate corrosion protection is required on flex connectors, treat each flex as if it were an individual metal pipe.

Attach additional sheets as needed.

Facility name:

Date of test: 9/4/2012

(Note: The facility name and date of test will automatically populate from page one upon printing, if filled out electronically.)

11. Description of UST system

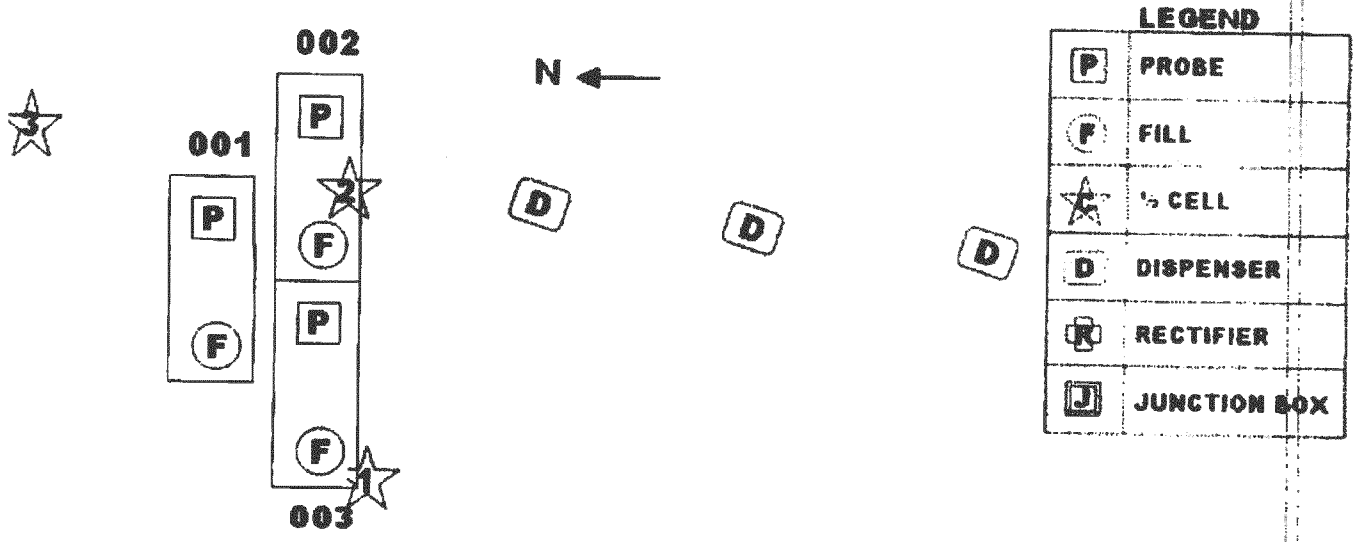
Tank/ Pipe #	Product	Capacity (Gallons)	Tank type[1]	Piping type[2]	Metal Segments at Tank sump[3]	Metal Segments at Dispenser[3]
1	001 Unleaded	10000	Steel	Steel	Steel	Steel
2	002/003 Prem/Dsl	10000	Steel	Steel	Steel	Steel
3	Split Tank					
4						
5						
6						
Ex:	*Premium*	*10,000*	*SW* sti-P$_3$®.	*DW Fiberglass*	*CP w/ anodes*	*In Containment*

1. Indicate if tank is Double Wall (DW) or Single Wall (SW). Also indicated type (e.g., steel, fiberglass, sti-P$_3$®, composite etc.). Also indicate if tank is compartmental if applicable
2. Indicate if piping is Double Wall (DW) or Single Wall (SW). Also indicate type (e.g., coated steel, fiberglass, galvanized, flex, etc.).
3. Indicate how metal segments such as flex connectors or metal pipe segments are protected from corrosion (e.g., isolated, booted, bonded, CP w/anodes, in containment, etc.)

12. UST facility site drawing

Attach detailed drawing or use the space provided to draw a sketch of the UST and CP systems. At a minimum you should indicate the following: All tanks, piping and dispensers; Location of anodes if known; All buildings and streets; Location of CP test stations; Each reference cell placement (local and remote) must be indicated by a code (e.g., 1,2, T-1,) corresponding with the appropriate test in Section 10 of this form. If supplemental anodes are added to the tank system, indicate number, size, location and depth of the new anodes. **An evaluation of the CP system is not complete without an acceptable site drawing.**

[Indicate North Here]



✓East Lake

ELC
36040 HWY 65
MCGREGOR MN 55750

JUL 31. 2012 8:00 AM

CSLD TEST RESULTS
- - - - - - - - - - - -
JUL 31. 2012 8:00 AM

T 1:UNLEADED
PROBE SERIAL NUM 411286

0.2 GAL/HR TEST
PER: JUL 31. 2012 PASS

T 3:DIESEL
PROBE SERIAL NUM 411288

0.2 GAL/HR TEST
PER: JUL 31. 2012 PASS

Q 2:PREMIUM
0.20 GAL/HR RESULT:
AUG 25.2012 8:49AM PASS

Q 3:DIESEL
0.20 GAL/HR RESULT:
AUG 25.2012 10:06AM PASS

Q 1:UNLEADED
0.20 GAL/HR RESULT:
AUG 25.2012 9:39PM PASS

ELC
36040 HWY 65
MCGREGOR MN 55750

AUG 26. 2012 12:00 AM

ELC
36040 HWY 65
MCGREGOR MN 55750

SEP 15. 2012 8:00 AM

CSLD TEST RESULTS
- - - - - - - - - - - -
SEP 15. 2012 8:00 AM

T 1:UNLEADED
PROBE SERIAL NUM 411286

0.2 GAL/HR TEST
PER: SEP 15. 2012 PASS

T 3:DIESEL
PROBE SERIAL NUM 411288

0.2 GAL/HR TEST
PER: SEP 15. 2012 PASS

Q 1:UNLEADED
0.20 GAL/HR RESULT:
OCT 4.2012 2:39AM PASS

Q 2:PREMIUM
0.20 GAL/HR RESULT:
OCT 4.2012 7:45AM PASS

ELC
36040 HWY 65
MCGREGOR MN 55750

OCT 5. 2012 12:00 AM

NOV 30. 2012 8:00 AM

CSLD TEST RESULTS
- - - - - - - - - - - -
NOV 30. 2012 8:00 AM

T 1:UNLEADED
PROBE SERIAL NUM 411287

0.2 GAL/HR TEST
PER: NOV 30. 2012 PASS

T 2:PREMIUM
PROBE SERIAL NUM 411286

0.2 GAL/HR TEST
PER: NOV 30. 2012 PASS

T 3:DIESEL
PROBE SERIAL NUM 411288

0.2 GAL/HR TEST
PER: NOV 30. 2012 PASS

DEC 15. 2012 8:00 AM

CSLD TEST RESULTS
- - - - - - - - - - - -
DEC 15. 2012 8:00 AM

T 1:UNLEADED
PROBE SERIAL NUM 411287

0.2 GAL/HR TEST
PER: DEC 15. 2012 PASS

T 2:PREMIUM
PROBE SERIAL NUM 411286

0.2 GAL/HR TEST
PER: DEC 15. 2012 PASS

T 3:DIESEL
PROBE SERIAL NUM 411288

0.2 GAL/HR TEST
PER: DEC 15. 2012 PASS

Dave, I cant find the correct slips for Aug. and Oct. they weren't in my folder. ?

JAN 15. 2013 8:00 AM

CSLD FULLEST LAST PASS
- - - - - - - - - - - -
JAN 15. 2013 8:00 AM

T 1:UNLEADED
PROBE SERIAL NUM 411287

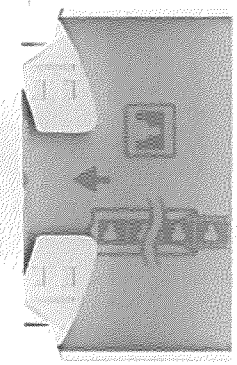
0.2 GAL/HR TEST
PER: JAN 1. 2013

T 2:PREMIUM
PROBE SERIAL NUM 411286

0.2 GAL/HR TEST
PER: JAN 3. 2013

T 3:DIESEL
PROBE SERIAL NUM 411288

0.2 GAL/HR TEST
PER: JAN 14. 2013



Scott Hansen

From: Scott Hansen
Sent: Monday, September 24, 2012 11:34 AM
To: Restaino.Mark@epamail.epa.gov
Subject: FW: TLS350 programming

Scott Hansen
Environmental Program Manager
Mille Lacs Band DNR/E
(320) 532-7445 business
(320) 532-7514 fax
(320 630 2439 cell

From: Don Kruschke [mailto:dkruschke@pump-meter.com]
Sent: Wednesday, May 30, 2012 4:02 PM
To: Scott Hansen
Cc: Bob Harrington
Subject: TLS350 programming

Hi Scott
I guess I have been out of the field to long!
I talked to my senior tech and it is not possible to program the TLS350 to automatically print the ELLD monthly test results
It has to be done manually at the console but it is pretty easy using the steps listed below.

TO PRINT ALL PLLD TEST RESULTS :

In the Operating mode,
Press **Function** until you see the display below:
PRESSURE LINE RESULTS
PRESS <STEP> TO CONTINUE
then press **Print**:

I believe the guys are going to be doing the ELLD test this week they should have contacted you
Sorry about the miss information on the TLS350 auto printing I asked the tech's to show the manager how to do it
Thanks

Don Kruschke
Pump and Meter Service, Inc | Service Manager
www.pump-meter.com
O: 952.215.0627 | C: 612.363.2189 | F: 952.939.0418
Twitter: @pumpandmeter